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TENUICOLLIS FROM SHEEP BY SEQUENCING OF MITOCHONDRIAL CYTOCHROME C OXIDASE SUBUNIT 1 (COX1) GENE IN CHABAHAR, ZAHEDAN PROVINCE

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Cysticercus tenuicollis is the larval stage of the canine tapeworm *Taenia hydatigena, which* is prevalent in domestic and wild ruminants. *T. hydatigena* is one of the most prevalent cestodes in dogs in Iran. Metacestodes are in liver of intermediate host. The aim of this study was to provide molecular characterization of the sheep isolates of C. tenuicollis by PCR amplification partial sequencing of COX1 gene. C. tenuicollis bladders were collected from liver of sheep during routine veterinary inspection in abattoir of Chabahar, Zahedan province, Iran. Two samples were transported to Department of Medical Parasitology and Mycology, School of Public Health, Tehran University of Medical Sciences. Following DNA extraction, fragment of cytochrome C oxidase 1 (COX1) gene was amplified by PCR. After sequencing of amplicons, they were edited and aligned, using Chromas software. Sequences analysis was undertaken by BLAST algorithms and databases from GenBank. Result: The amplified fragment size was approximately 446 bp. Partial sequence of COX1 gene was corresponding with C. tenuicollis. The isolates were different with each other in one nucleotide.According to the alignment results; two isolates had 99% homology with C. enuicollis in GenBank with accession number DQ995656 and AB792722, respectively. In order to study probable difference between isolates in the study area, sequencing of more isolates from different hosts is needed.

Keywords: Cysticercus tenuicollis, *Taenia hydatigena*, cytochrome C oxidase 1 gene

EPIDEMIOLOGICAL ASPECTS OF ENTEROBIASIS AMONG PRESCHOOL CHILDREN IN MAZANDARAN PROVINCE

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The aim of this study was to determine the prevalence of Enterobiasis and the association between clinical features, potential risk factors among preschool children in Mazandaran region. In this cross – sectional study 653 preschool children randomly assigned to the seven districts and evaluated using Graham technique for oxyuriasis. Demographic data with questionnaire-designed questions were collected. SPSS version 17 and χ^2 test for statistical analysis was used. Of 653 children, 127 (19.4 %) were infected with Oxyuris- 52 (40.9%) were male and 75 (59.1 %) were female. No relationship was found between infestation and gender. The highest infection rate was observed in the city of Neka (61.4 %) and the lowest infection rate in Tonkabon and kyasar (6.1%). The relationship between infestation and residence, parental occupation, parental education, number of household members, changing underwear, sterilizing linen clothes, bathing daily, boiling or ironing clothes were significant. The relationship between infestation and clinical signs was also significant.

Keywords: oxyuriasis, preschool children, province, epidemiology